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ABSTRACT

This paper discusses creativity in young children and what teachers can do to support and promote it. Topics addressed in the paper include: (1) teacher interest in promoting creativity; (2) defining creativity; (3) creativity in the socioemotional domain; (4) the relationship between creativity and empathy for others; (4) bibliotherapy; (5) learning the secrets of promoting divergent thinking; (6) encouraging child cooperation to create a climate for creativity; (7) sharpening children's verbal tools; (8) humor to promote divergent thinking; (9) enlisting curricular components to engage children's creativity (such as music, art work, dance, drama, puppetry, and movement); (10) creating classroom time for imagination games; (11) how a strong knowledge base undergirds creativity; (12) how creative scenarios may serve children's deeper psychological needs; (13) imaginary parties to create a happy indoor climate during severe winters; (14) promoting poetry to prominence in the classroom; (15) celebrating creative writing; (16) classroom arrangements that enhance child creativity (such as dramatic play spaces); (17) power relations in the classroom that affect creativity; (18) other experiential domains where teachers can encourage creativity (including collections); (19) decreasing "consumer gimmees" through emphasis on creativity; (20) partnering with parents to enrich creativity in children's lives; (21) the connections between creativity and mental health in early childhood; (22) the directions of creativity research, practice, and policy in the next decade; and (23) promoting creativity in society (including gender and creativity, the importance of fairy tales, and creative activities as buffers against stress). (Contains 66 references.) (EV)

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PROMOTING CREATIVITY IN YOUNG CHILDREN[1]

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Teachers of preschoolers and young grade school children often remark on the marvelous "creativity" of young children's drawings, dramatic play, and invented language. Children show imaginative use of color, themes, and flights of fancy in their language. One preschooler remarked to her mother in passionate disappointment as her quarters in a coin machine produced only a tiny piece of candy : "They highered the money and they smallered the candy bar". When I showed a home insurance ad (with some men pulling a sofa out of a house window and looking around furtively) to a four-year-old and asked him to tell me about this picture, he regarded it intensely and then burst out indignantly " Teacher! Them be thiefers!" And indeed, the whole purpose of that ad was to make readers worry about thieves so that they would be galvanized to purchase household insurance.

Many children who have produced awesomely splendid drawings and clay work in early childhood seem to "lose" creative responses to problems and to lose creative dramatic expression and art ability as they move through the school system. A mystery. By their tests of creative or divergent thinking, Torrance and Gupta

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(1964) have revealed what they call the "fourth grade slump in creative behavior". "What are all the possible things Mother Hubbard could have done when she found no bones in the cupboard for her dog" proved easy for young children but "extremely difficult for many fourth graders" (p. 6).

Teacher Interest in Promoting Creativity

When I once asked a group of teachers in training whether they had ever considered the challenge that early childcare should produce intellectually gifted and creative children, most were surprised. Primary goals of childcare personnel are so often directed to keeping children safe and healthy. Early Childhood educators teach preschoolers cognitive tools, such as shape and color names, to prepare children for success at entry to elementary school. Further goals include encouraging more prosocial and less aggressive peer interaction in the classroom. Much of the focus of intervention programs of the last decades has been on preventing school failure and dropout among children who have not had rich life experiences, such as trips to the zoo or museums and daily story reading times. Because they much spend much effort to remediate or to introduce basic literacy and numeration skills in early grades, teachers may have less opportunity to think specifically about the deep importance of nurturing children's gifted and creative behaviors.

Defining Creativity

Teachers and recreation counselors involved with young children vary in their definitions of creativity. Some call it "an

innate style of boundless, individualistic, divergent thinking" (Palladino, 1997, p. xiii). "I would suggest that the definition of creativity focus on the process of divergent thinking (Dowd, 1989, p.233). Creativity is associated with breaking up of old ideas, making new connections, enlarging the limits of knowledge, the making of sudden, astonishing new connections, and, in Duckworth's (1996) felicitous phrase, "the having of wonderful ideas". A more general definition sees creativity as empowering because it is "an innate capacity for growth" (Cohen, 2000, p.33). Torrance (1970) defines creative thinking as adventurous, getting away from the obvious and common place, a successful step into the unknown and unexplored. He has explained:

> I regard creativity as a special kind of problem solving...the product of [this] thinking has novelty and value...[and] requires high motivation and persistence and is unconventional in the sense that it requires modification or rejection of previously accepted ideas.
>
> Learning through creative and problem-solving activities, in addition to recognition, memory, and logical reasoning, requires such abilities as evaluation (especially the ability to sense problems, inconsistencies, and missing elements), divergent production (e.g. fluency, flexibility, originality, and elaboration), and redefinition. (p2)

Some of the correlates of creativity may be troubling to teachers. "Hyperfocus" on a process or project of great personal interest may make the child difficult for a teacher to reach with

more mundane information, such as the homework assignment for tomorrow. Other children may daydream a lot about their adventures as a great superhero in their private mental comic strip. The diverse thinker may "whirl with ideas and images" and seem almost hyperactive and restless in the classroom (Palladino, 1997, p.22).

When creative children behave in self-absorbed ways they may even ignore rules for courtesies in the classroom. The teacher or recreation counselor has to struggle to remain a source of calm strength and kind reassurance as well as firm insistence on keeping a safe space for all the children. The adult also has to focus on the strengths and unique qualities of each child, even when the child' creative responses result in experiments that exasperate - for example, squeezing all the paint tubes together to produce a muddy mound of paint and the other children have no paint to use.

TECHNIQUES TO PROMOTE CREATIVITY

What skills and techniques shall adults use in group care to enhance creativity in varied domains?

The Socioemotional Domain

Perhaps of greatest urgency is teacher creativity in helping children toward more mature solutions to the emotional tasks of early childhood. For each caring adult is a mirror wherein each child learns the worth of the self and the self's ideas. Adults need to be particularly creative in their generous use of **specific praise**, their positive descriptions of student work and efforts and ideas (Goetz,1981;1989) rather than criticism. Self-monitoring and **self-reflectivity** are powerful tools to keep adults focused on the

uniqueness of each child and on the pedagogical challenge to nurture trust and creativity in each child. An internal locus of control has been associated more with creativity in kindergarten girls, although not for boys (Cohen & Oden, 1974).

Many teachers hold classroom group meetings to get children thinking about any tensions or tussles among themselves, so that the children can generate solutions of their own. These are ideas often promulgated by A. S. Neill in his unique school in England. Neill drew upon all the social problem solving creativity of the children to manage their own problems, such as setting a rule about the hour of the evening when another child in the dormitory could no longer play blasts of a trumpet because that would keep other youngsters awake.

Creativity and Empathy for Others: Are they Related?

Many teachers take an active role in promoting empathic understanding of others' feelings. Creative art or music creations can emerge from solo activities by children. However, creative **social** play responses become impossible when a child cannot grasp how another youngster feels.

> When he was threatening a younger child in an after school program by cornering her under the stairwell with a bat raised on his shoulder, Corrie (a foster child who had been severely abused the first years of his life), told the recreational counselor who rushed over at hearing the little girl's cries, "But I was only holding my bat on my shoulder. I wasn't hurting her." Corrie is not able to understand the younger

child's point of view. He wants to play with her but cannot grasp how his actions seem threatening rather than playful.

Bibliotherapy: A Tool for Teachers

Creative use of bibliotherapy energizes children to think up ways to cope with their own personal troubles as they listen to how the child in the story is coping. Read books that stimulate children's ability to enter into the adventures of others, to re-create scenes and scenarios. Such books often help heal a worry or hurt or resentment in a child faced with difficult family situations, such as divorce quarrels, or death of a pet or simpler sorrows, such as parental inattention, as in the wonderfully illustrated book reflecting a young boy's complaint "My mother never listens to me" (Sharmat,1984). Jerome is a child who creates fantastic scenarios to get his mom's attention. He tells her about a mom who wouldn't take her nose out of a book and so the king took her nose and put it in a freezer! He warns his mom there is a huge giant creeping up in back of her. He dangles the possibility that he will invite all the neighborhood kids in for lunch so that he can teach them a new dirty word he has learned. Kids who have ever felt impatient with their parent's long telephone conversation or attention to a visiting relative will revel in the creative ways that the boy devises to try to engage his mom. In the end, his simple but magic request for a kiss does bring his mom into full and affectionate attentiveness.

Adults Need to Learn the Secrets of Promoting Divergent Thinking

Divergent thinking is essential for intellectual and social

creativity. However, teacher guidance is a "necessity" for promoting children's learning and creativity (Torrance, 1970, p.10). Trusted caregivers are particularly important for sustaining children's motivation and passion for in-depth learning. One teacher technique is to encourage kids to keep on **generating new hypotheses** and to avoid premature closure on evaluations.

Teachers advance complex thinking when they support children's awareness of and ability to become **comfortable with ambiguities**. This is a more difficult task with early preoperational children since they tend to think in rigid categories (such as all-good or all-bad). Preschoolers need training and explicit help in seeing that it is possible to hold two contradictory ideas or feelings at the same time. Real-life examples can assist in this work.

> Joey, an older toddler, was so glad to be invited and to go and eat birthday cake at Amy's birthday party. He also felt quite grumpy and sad that he did not have the wonderful Thomas the Engine toy that Amy got for a birthday present.

Five-year-olds may still find it difficult to hold two categories in mind even when they are not opposed.

> Dana's daddy was driving me to the airport. I told her in the car how happy I was that her daddy could chauffeur me by driving his car so that I could get to the airport in time to catch my plane. "Can a man be a daddy and a chauffeur too at the same time?" I then asked her. " Of course not. That's silly", she answered quite assuredly.

Give children digestible experiences in playing with ideas that may be ambiguous or uncertain. If you help children in practical, easy ways to hold contradictory or opposite ideas and feelings in their mind at the same time, this will also help them self-discipline more creatively. Shure's (1995) ICPS (Interpersonal Cognitive Problem Solving or I Can Problem Solve) program gives teachers language tools to encourage this kind of divergent thinking. Here is a brief list of some ICPS ideas for positive discipline that empower a child to think creatively about his or her behaviors.

> One feeling or idea IS/IS NOT the same as another person's (your best friend wants to go bike riding; you want to play checkers). Some feelings and wishes are the SAME as those of others; some are DIFFERENT. A friend may want to play the same game as you SOME of the time, but not ALL of the time. You can do some actions NOW or LATER. Some actions occur BEFORE and others AFTER (Johnny hit his brother AFTER his brother knocked down his block tower). One idea could be a good idea or NOT a good idea (Is hitting another child a good idea for getting back your toy?). What MIGHT happen next? IF one child hits his playmate, then the other MIGHT hit back. Help children think of the CONSEQUENCES of actions and of ALTERNATIVES - other ideas they could carry out to resolve social tussles. (Honig, 1996,p.9)

Shure's ICPS system counts on stimulating children's own creativity (rather than the use of adult power assertions) to find

solutions to their squabbles and disagreements. If-Then thinking sharpens reasoning skills and sparks a child's own creative solutions to conflicts. If I do X, then what will happen next? Will the block tower topple? Will Johnny kick me back?

Encouraging Child Cooperation Creates a Climate for Creativity

The prevalence of inclusive classrooms with a wider range of child typicality and atypicality has impelled teachers in recent years to come up with creative solutions to facilitate children from very different intellectual or education levels working together. Some schools use Aronson's (1978) **Jigsaw Method.** Students are assigned to six-member teams. Each student is given 1/6 of the material to be learned for a presentation. One group, for example, may work on Columbus' voyage, another on the settling of the West. Each of the children in each jigsaw group becomes an expert on a small portion of the material studied, yet each member of the group is tested on the topic material which they have all shared and discussed with each other. In a way, this peer teaching of each other, with each child being an "expert" on a small piece of the assignment, empowers all the children to become more innovative contributors to the collective presentation. When I tried this technique with college students studying language development theorists, one group arranged their presentation as a mock radio show, pretending to quiz famous professors, such as Dr. Chomsky (role played by a student). Another student came with a chimpanzee mask on and was quizzed on the "show" as to what he had learned from his interactions with another famous linguist! The group

working together produced more ingenious "reports" than previous terms papers assigned to individuals.

Happily, teacher efforts to create a prosocial classroom often spark creativity among the children (Sapon-Shevin, 1986). **Cooperative telling of tales** involves one child starting a story; then each player in turn adds a little portion to continue the story. Children may be asked to use their bodies to create various shapes, such as letters or geometric forms.

Creative thinking is implicit in many of the **cooperative games** suggested by Orlick (1978). In his game of Big Snake, the children stretch out on their stomachs and hold the ankles of the person in front of them to make a two-person snake. This dyad slithers over on its belly to connect up to make a four-person snake and so on. The children have to figure out how the snake could slither up a mountain or figure out a way to flip over the whole snake on its back without losing its parts.

Sharpen Children's Verbal Tools to Promote Creative Thinking

Aphorisms, metaphors, and similes are rich verbal tools to promote divergent thinking.

> A four- year- old heard his mom talking on the phone to his daddy. Then she turned with a disappointed face and said, "Jamal honey, we need to eat supper alone tonight. Daddy is all tied up at the office." Jamal promptly burst into tears.

Some children need a lot of help to understand the symbolic nature of metaphors.

Grade school teachers can stimulate such thinking by asking

children to gather metaphors and similes from family members and bring them to class. The whole class may become energized by their discussion of the meanings of sayings such as:

You are always splitting hairs

He is as slow as a pig in a poke

One swallow doesn't make a summer

Penny wise, pound foolish

The apple does not fall far from the tree

You can lead a horse to water but you can't make him drink

Don't look a gift horse in the mouth

You are the apple of my eye

She could sell me the Brooklyn Bridge

The rosy-fingered dawn

Don't make a mountain out of a molehill

There's something fishy about his story

Where there's smoke, there's fire

That baby's nose is as cute as a button

Talk about metaphors, similes, and aphorisms. Encourage children to create their own similes. Some four-year-olds can tell you that the clouds look like fluffy cotton.

One way to introduce the difference between literal versus symbolic talk in class is to provide Amelia Bedelia books for children to read (Parish, 1963). Cheerful Amelia Bedelia is a wonderful cook. Hired as a housekeeper, she interprets literally whatever she is asked to do by her employers. Thus, she cuts out cute clothes to "dress the chicken"; she "draws the drapes" with a

crayon on a piece of paper; she dusts the furniture carefully with dusting powder! As children giggle over each of Amelia Bedelia's misinterpretations they become more aware of language as a tool to express oneself imaginatively as well as literally. The more metacognitive skills children can acquire, the better able they will be to gain creative insights and interpret symbolic subtleties in stories and novels.

Socratic or open-ended questions are a splendid way to get children's thinking juices flowing. Divergent questions function as instigators, activators, and organizers of mental operations (Sigel & Saunders, 1979). Socratic questions help a child distance psychologically from the here and now. They offer the chance to retrieve items from memory, contrast and compare ideas, transform or rearrange elements or things into a new sequence at the will and choice of the child. Comparisons, choices, entertaining new ideas and formulating personal responses to them are all part of the ferment of creative thought we so fervently want to engender in children. Although divergent thinking skills are so essential to creativity, research reveals that teachers overwhelmingly (85%) use convergent rather than divergent questions with preschoolers (Honig & Wittmer, 1982).

If given the opportunity to keep a journal of their own and to sketch, doodle, and write responses to quixotic and challenging Socratic questions, grade school children become more assured in drawing on their own rich and wonderful ideas. Myers and Torrance (1995; 1966) created books chock-full of open-ended questions for

which children are encouraged to think up answers. Here is a sampling of their open-ended questions to inspire children's creativity:

What could happen if it always rained on Saturday?

What if cars never wore out?

If you saw a moose in your backyard chewing your mother's favorite flowers, what would you do?

Why don't we wake up with our hair neat and combed?

What would happen if a cow and a bee and clover got together?

Can you think of some other interesting " get-togethers?"

What could happen if cats could bark when they wanted to?

What could happen if all the shoes in the world were the same size?

When some questions are too difficult for a child, that may be because they have had little experience in the real world with the creatures named (some city children have never seen a cow or clover). Be sure to tailor your imagination-provoking questions to the current experiential knowledge of some of the children. When possible, take the children on a field trip or show them a video or have a farmer come to class and talk about the creatures that some children only know about verbally from singing "Old Mcdonald had a farm."

Humor Promotes Divergent Thinking

Humor is a great tool for teachers. Humor has orderly developmental stages (Honig, 1988). Even toddlers carry out jokes physically. A young toddler stuck her bare foot in her papa's

cylindrical tennis ball container and announced "Shoe!" in great glee. An older toddler pretended to make a milk mustache out of a piece of white paper.

Verbal joke making sometimes starts between two and three years of age. Toddler: "Daddy, 'oggies go meow meow." "No honey. Doggies go 'woof woof'." After a few more valiant attempts to woo her father with her first created joke, this toddler succeeded. She rolled on the floor with laughter when he finally replied: "Oh of course, honey. And kitty cats say "woof woof!"

Try simple "knock knock" jokes with young preschoolers. Vary your tones: "Order in the court!" "Sure your honor. Ham and cheese on rye!" is a favorite of grade school children.

After I had gone through a series of easy jokes while visiting with an Australian nine-year old, he asked "Want me to tell you one?" I agreed with enthusiasm and he asked me: "What do you get when you pour hot water down a rabbit hole?" When I gave up he replied triumphantly "Hot cross bunnies!" Linguistic tongue twisters and humorous jokes using double meanings of words lighten the school atmosphere and may earn you back some jokes the children can share with you.

Puns, awful and easy to groan at, enliven lesson plans with elementary school children. Math problems and history lessons seem easier when children catch on to puns, grin, and view their "lessons" as less grim emotionally. For example, in "Sir Cumference and the first round table" (Neuschwanter, 1997) characters such as Lady Di of Ameter and their son, named, of course, Radius, can make

learning geometry a more creative learning experience, especially for children who are scared of math terminology and operations.

Writing a **silly story** is another exercise that can free up a child who is reluctant to write more than a sentence or two. If the "assignment" is left open for the child to choose, then she or he may be more assured that WHATEVER is imagined will be a fine story to write. Before some children, often criticized for spelling errors or messy papers, are willing to undertake such an assignment, they need to develop trust that you truly will accept their silly names, ideas, and crazy plots. Encourage the children to draw pictures to illustrate their stories.

Enlist Curricular Components to Engage Children's Creativity

Making music. Singing and making music with instruments, creating lyrics, changing well known lyrics have always been a preschool domain in which young children experience much pleasure. Grade school age children, much to the dismay of adults, have even excelled at creating scatological rhyming verses of songs that children have shared for generations. An oldie every summer camper has learned begins: "I took my girl to a baseball game.." and continues on: " Country boy, country boy sitting on the grass; Along came a bumble bee and stung him in the...Ask me no questions, I'll tell you no lies... "etc. Children giggled as they sang these "creative" lyrics well out of earshot of their teachers or parents.

Making music does not have to involve either unprintable lyrics of years ago or of today's CD's. Many folk songs and rhymes spark off-beat images and notions. "Oh Suzannah, oh don't you cry

for me; for I'm going to Alabama with my banjo on my knee. The day I left it rained so hard; the weather it was dry; the sun so hot I froze to death, Suzannah don't you cry!"

Enjoy belting out such musical absurdities with children. Get them to talk about what is silly in the song. Encourage them to make up further absurd rhyming couplets for simple songs, such as "Mr. Froggy went a courting and he did ride, a sword and pistol at his side." This interminable song allows a child to add her own couplets about the guest list at Mr. Froggy's wedding with Miss Mouse. "Next came in was Mr. Moth and he did bring the table cloth." could be one contribution. Creating silly songs and adding rhymes to familiar songs stimulate children's play with language rhythm and rhyming sounds. This creativity is in contrast to passive listening to favorite CD albums or to slavish imitation of rock stars in lieu of creating music on one's own.

Folk music collections provide a rich source for rollicking songs with poignant and with mischievous imagery that grade school children will enjoy. An old New York State canal boat song about rising waters (a patent absurdity on the canal!) offers the captain's impudent solution to the barge's "precarious" position: "The cook she was a grand old gal and she wore a bright red dress; We hoisted her upon the mast as a signal of distress, as a signal of distress!"

Toddlers particularly relish chants and songs that have accompanying body and hand motions. "The wheels on the bus go round and round is a favorite in preschool. Kids grin as they sing out

the verse where "The babies on the bus go 'wah wah wah' all through the town".

Art work. Easel and finger painting while listening to classical music, drawing, clay work, making potato prints, slithering cornstarch goop between fingers - are just a few of the art activities that are already staples in many early childhood classrooms. In addition, children love to make mudpies, sift sand through sifters, experiment with pouring water out of fruit juice cans with pinholes at different levels. Plastic art activities and water play are emotionally satisfying as well as suggestive of creative uses as children become absorbed in play with these materials.

However, just because an adult sets up art projects in a classroom does not mean that these projects intrinsically will be furthering child creativity.

A teacher had set up easels and given a large brush to each young preschooler. "Remember, you need to draw a blue circle " she reminded each child as she went around adjusting smocks and providing each child with a jar of blue poster paint. Lorene dabbed blue on her paper. In dreamy pleasure she watched the patch of blue on her paper. Then she re-dipped her brush and watched wide-eyed as the blue of her initial swath deepened in color and great drips of blue paint slowly crept down the easel paper. She was creating a deeper tint of blue. Absorbed in her small creation, she was startled when the teacher coming near remarked, "Remember you are supposed to draw a blue circle, honey." Seeing with the child's

eyes, we can appreciate the discovery of how layering more and more color changes the intensity of the color and the amount of drip. Teacher sensitivity to the power that a child's discoveries can make (whether in art or science, or dramatic play, for example) best unlocks the passionate commitment and delight that are a bedrock requirement for creativity.

Sometimes a teacher needs to think about how a picture feels to a child as well as how it looks. A preschooler had drawn a vehicle on a street. Then he smeared brown paint all over the picture he had drawn. When I asked about this, he stared at his picture and said "That was the ambulance that took my daddy to the hospital." His creative response to express his mood and feelings resulted in a picture scribbled over with sorrowful brown color, rather than presenting the literal drawing of an ambulance. The sensitive teacher surely does not exclaim "But look, now you have ruined your nice picture."

Dance, drama, puppetry, and movement. Some little folks need to be in intense active movement a lot of the time. For them, it might be wise to encourage dance and movement as often as possible (Benzie, 1987; Chenfeld, 1995). Ask parents to help by sewing up edges on huge gauzy squares and rectangles of nylon in wonderful colors. Then put on slow dance music, such as the Skater's Waltz, and let the children dreamily create patterns of whirling color in space while they make up movements to the music.

Children learn to represent by using their bodies in space. Toddlers love to try to hop like a bunny; preschoolers might like

to try to move like a turtle, a dragonfly, or an elephant; grade school children are sophisticated enough to form a group to act out the parts of an old rumbling washing machine about to fall apart. Ask the children whether they can use their body motions to represent emotions, such as joy or scared feelings, or mad feelings or surprise.

> A young toddler was finishing his bath. Fascinated by the swirling water, as his father let the water out of the tub, he started curling and twisting his chubby little body to reproduce the graceful motions of the water gurgling down the drain. His dad let him "dance" the water pattern before lifting him out for a towel rub and pajama dressing.

Bodily grace is one of the ways in which some children show their special talents. Ask children to "Show how you would be a raindrop or a kite by dancing like one; by singing about what would happen to you if your were one; by drawing what you think would happen to you if you were one (Myers & Torrance, 1965, p. 7).

While working with disadvantaged children ages six through fourteen, Torrance (1970) overcame their fear of creative dramatics and role playing by use of "Magic Net", piece of nylon net 36" by 72" in various colors. In his Creative-Aesthetic Approach, Torrance gave several children each a piece of the net and asked them to choose some role - a person, animal or other being that they wanted to become. Then, he asked them to wear the net and in turn to stand, walk, and dance like the designated creature they had chosen. The use of Magic Net impelled children toward more fluency

and originality in creating dramatic scenarios.

> Next, the entire group would begin making up a story, using the roles chosen by the children with the "Magic Nets." The role players then enacted in pantomime the story as it was told by the audience...The problem of the actors was to interpret through movement or pantomime the actions related by the storytellers." (p.3-4)

One child wanted to play a bear but was too timid to play the role she had chosen. When Dr. Torrance engaged some peers to be other bears with her, she was able to be successful and even act as a scary bear.

For teachers who may not have prior experience in using creative drama strategies in the classroom, activities for 3 to 13-year-olds are available with step-by-step procedural guides (Kelner, 1993).

Ewart (1998) a Scottish primary school teacher, has introduced techniques for teachers to work with children in making imaginative and magical puppets and screens, writing plays, and using shadow puppetry. Pleydell & Brown (1999) describe an experiential program to explore ideas and situations through story dramatizations that include the use of props and adapting to special needs.

Create Classroom Time for Imagination Games

"Just Imagine" games permit children to take off on flights of fancy that require then to retrieve from memory, compare and contrast, and make connections between disparate bits of information (Honig, 1982; Lane, et al, 1982). Myers & Torrance

(1965) showed children from low-income households an interesting picture of a pond and asked the children to imagine that they could enter into the life of the pond and become anything they wanted to be. The children later drew murals of their imaginative pond life scenarios and discussed their paintings and the problems of painting animals in a pond with water that may cover up the animal you choose to represent.

At rest time, after a quiet period, you might let the children conjure different imaginary scenarios, such as being a fly busily walking across the ceiling. What are they looking for? How do the children on their cots look to the fly from an upside down vantage point on the ceiling?

Ask children to pretend. "You can become any animal you want to. Which animal would YOU choose. Tell me what you would do all day long as that animal. What kinds of games would you play with friends if you were that animal?"

Pretend voyages are something all the children enjoy in the series of books about The Magic School Bus. The teacher takes the class on wonderful trips of imagination, deep under the seas or up into space or to strange lands. These imaginary voyages stretch children's ability to wonder, to imagine, to create new scenarios and experiences through the awesome "trips" in the Magic School Bus.

Some creativity games, such as the "One goes back" game, help a child learn more clearly who she or he is, what are personal preferences and reactions. Suppose you were given these three

objects: "Which one of the three would you give up, if you had to give one back? Why? What could you do with the other two things? Could you use them together (Myers & Torrance,1965 p. 23)".

The **Uses** game (Torrance & Gupta, 1964) draws on children's ability to conjure up lots of usual and unconventional uses for objects, such as a tin can, paper clip, cardboard tube from a paper towel, paper bag, a bell, or any other ordinary item. When I gave some men's old ties to six-year-olds, they pretended to use them for seat belts while taking an airplane trip; they used them as lion tamer whips as if they were circus masters; they pretended the ties were slithery snakes crawling on the floor. Give children the chance to play out their imaginative scripts with such props and then enjoy your peek into the window of their creative conjuring.

A Strong Knowledge Base Undergirds Creativity

Knowledge and experience form a rich loam from which creative ideas can flower in the group. Without a strong knowledge base, even a gifted child may not be able to experiment creatively with science ideas and materials. Part of a teacher's work in promoting creativity has to be to enlarge and enrich children's knowledge base of the world. A narrow knowledge base ill prepares a child to participate in all the creative adventures a teacher is prepared to offer in the classroom.

Some four-year-olds can recite the multisyllabic names of a plethora of dinosaurs. There are six-year-olds who have travelled abroad with their families and seen other peoples' homes, clothes, and life styles.They have heard the music of other lands and

peoples. The child from a restricted home environment who has never visited a museum nor seen dinosaur skeletons nor watched a sea anemone unfold near a sea-salt suffused New England shore may not have enough grist for creating imaginative scenarios. The child with poor reading skills who has not read about King Arthur or the imaginary realms of The Hobbit sometimes can only fall back on the two-dimensional violent villains of TV, such as Ninja turtles (Honig, 1998). He or she can imitate in the classroom, with real kicks and pretend guns made of fingers or wooden blocks, what they have seen superheroes act out violently on the screen.

Creative Scenarios May Serve Children's Deeper Psychological Needs

Why do some children play out the same scenario - being a mommy of many little babies, or a cape-flying Superman? The same scenario may serve deep psychological needs for self protection against too many perceived threats to a child's emotional integrity. Paley (1990) vividly describes such a preschooler who needed with great determination to be, to crash, and to repair a helicopter day after day, month after month. Other children are open to such multiple sights, sounds and ideas that they are not able to listen to the teacher; they cause uproars and commotions. Sometimes their astonishing mental connections, their need to be doing or dreaming rather than studying, and their unconventional responses throw off a teacher who is trying to get through a class syllabus. They need a calm steady teacher who recognizes and redirects distracting behaviors and yet values the intense interests and insights these children sometimes produce. If some

creative children do have ADHD (Attention Deficit and Hyperactivity Disorder) the teacher must work with parents as they explore with their pediatrician and with a trained professional in making a decision whether to use medication to permit the child to focus on lessons and to settle into seat work so that he or she achieves success in school work as well as in creative self-initiated pursuits. This is a parental decision and teachers will want to be kept informed of any medications. Not only do teachers want to spark creativity in kids; they also need to protect a classroom from the chaos that such "Edison Trait" kids as Palladino (1997) calls them, can create. Hartmann's old characterization of some folks as hunters and others as farmers is relevant here. Some children need the slow careful attention of the farmer to do classroom work. Instead, that child as Hartmann put it, is a hunter in a farmer's world. Sometimes judicious use of medication allows that child to focus on learning and to show real creativity in classroom accomplishments.

Imaginary Parties Create a Happy Indoor Climate During Severe Winters

Plan together with children to create indoor imaginative scenarios to lift the mood of the children during dark winter days. Get children brainstorming together to create a plan to actualize the special scenario. During dark days of winter when sleet and ice make it difficult to take the children out even for a half-hour walk, try creating a summer picnic in the childcare setting. Use a tan large muslin sheet on the floor. Spread sea shells and maybe

a few handfuls of sand in shallow plastic tubs of water. The children prepare a variety of sandwiches (although bologna and peanut butter and jelly make not be a teacher's idea of creative cooking!) and slices of fresh peeled cucumber and apple. Ask parents to send some summer wear so the preschoolers can change into swim suits and carry towels. Have a small plastic swim pool on a linoleum floor or on a large plastic drop cloth. After the children splash a while they can dry themselves with their beach towels. Other activities could be making sand pies and sorting sea shells on the edge of a "sand" sheet. If you ask around, parents may be willing to donate sea shells collected on trips for this special imaginary beach scene. Then the children can learn the names of sea shells they discover that you have strewn about the sand sheet. They can put sea shells into groups, such as "clams", snails, etc. Threes and fours are fascinated by making decorations with sea shells as well as sorting them and constantly asking you their names.

Creative programming "out of season" stimulates children to realize how some rules are very important to obey all the time, such as "not running after a ball into the street". Children can create a seashore and picnic experience of their very own in their own way in their own classroom, regardless of what the weather outside "dictates".

Promote Poetry to Prominence in the Classroom

Read poetry! Brain researchers emphasize how important it is to wire in neural pathways with variety and richness of language

interactions. "Use it or lose it" seems to be the rallying cry for brain development during the first years of life and "Cells that fire together wire together" (Healy, 1994). Andrews (1988) notes that exposing children to poetry encourages them to problem solve and to ask what is coming next. Even toddlers experiment with rhymes in their cribs. "Oogy, woogy, poogy" murmured a tiny one in sing-song experimentation with sounds while she hung on to her mother's hand as they walked along.

When the world of poetry is opened for grade school children they often produce wonderful personal writing. Younger children will ask over and over for special poems to be read aloud (Gable, 1999). Introduce poems that tickle a child's fancy and dreams (Hale, nd; McCord, 1961; Merriam, 1988). With older children try the outrageously funny poems in "The Sheriff of Rottenshot" (Preludsky, 1994).

Challenge children to talk about why a poem is funny or silly or sad or puzzling. Try this poem humorous and rollicking poem from Eve Merriam's (1985) book "Blackberry ink":

Bella had a new umbrella
Didn't want to lose it,
So when she walked out in the rain
She didn't ever use it.
Her nose went sniff,
Her shoes went squish,
Her socks grew soggy,
Her glasses got foggy,

Her pockets filled with water
And a little green froggy.
All she could speak was a weak **Kachoo**!
But Bella's umbrella
Stayed nice and new.

Encourage children to figure out why riddles are funny. Even older toddlers (who understand the form but not the double meanings for some "Knock-knock jokes") like to create their own riddles. A 2 1/2 year old to whom I was reading some silly poems asked me this riddle "Do you know why cats can't ride bicycles?" I thought about this for a while and then asked her for the answer. "Because they have no tush!" (Yiddish for buttocks) she grinned triumphantly.

Celebrate Creative Writing

Treat initial creative writing attempts as wonderful chances to experiment with ideas and sequences. Do not denigrate "sloppy" writing and do allow pencil and eraser use freely in order to let a child's thinking juices flow without fear of teacher disapproval of a messy paper.

> I asked a very serious ten year old child, whose parent was overly controlling about requiring "perfect" writing and school papers, to read aloud some riddles and write down why each one was funny. One riddle was: "How do you stop a dog from barking in the back seat of a car?" Answer: "Have him sit in the front with you"
>
> (Cerf,1964).

The child wrote: "Because the dog will bark in the front seat

too." What a beautiful smile he gave me as he creatively responded to this riddle. The child's teacher calls all "messy" homework papers "slumpy-dumpy" papers and the parent has learned to apply this term to the child's work. Now, worried, the parent wonders why this child no longer is willing to try to write a long book report. He told me he is so afraid to "mess up". "I press so hard on the paper because I feel tense" he confided. He is afraid to make a "mistake" in spelling or in his writing.

Sometimes we squash creative writing in school children simply by being unaware of how difficult writing utensil hand control and neat writing can be for some children. A simpler solution might be to allow a grade school child to use of the computer for all long compositions, in order to free up a child who can use the delete or cut and paste computer buttons with assurance that his or her finished book report will look just fine.

Children need opportunities to be inventive in writing stories and poems. They brainstorm for rhymes and accurate words that reflect their vision. They need to try their hand at rewriting endings for stories they have already read. Some children might enjoy creatively thinking up new titles for familiar and favorite tales. Forecasting plots, synthesizing diverse elements in a story - these are skills that the teacher may have to assess accurately and offer quite specific help to further the child's ability to move along the road to autonomous creativity in writing.

Allow very young children just learning orthography to

experiment freely with invented spelling. Allowing very young children to invent their spelling frees them to try early writing long before they have correct lexicon spelling ability."HRS LV HR" (horses live here) was the fine title a five-year-old wrote with elan over his picture of pinto horses among the sagebrush and cacti in a wild west setting.

Try Classroom Arrangements That Enhance Child Creativity

Arrange classroom opportunities for creative adventuring. Provide enough blocks and enough space for a safe block corner and enough cars and tracks for creating highways and bridges and traffic jams. Have easels already out and smocks with plastic flexible neck bands easy for youngsters to put on themselves. Save orange juice cans for poster colors so that when the cans get messy they are easy to replace. The Constructivist classroom allows children more choices of activities. Fewer time constraints for how long children can spend at an activity open a path for creative juices to flow unfettered by a classroom clock.

Although story reading times and circle "Show and tell times" are wonderful ways to increase social cohesiveness and shared experience in the classroom, be aware of the implications of requiring all children to participate together for other planned activities. Children may be discovering creatively on their own something not part of your specific lesson plan for them. If outdoors all the children are playing a circle game such as "Put your right foot in and turn yourself about" and Jolene wants to create a sand castle and dig vigorously and peacefully, a flexible

teacher is not threatened by this personal child choice. Nor does a "different" behavior choice of itself signify that there is a social problem. For example, some very friendly children have deep needs to create with blocks and have the block buildings "saved" for tomorrow rather than torn down so the blocks can be neatly stacked away for today. Perceptive adults handle such individual creative needs in ways to nurture a child's vigorous growth toward sustained creative enterprises rather than squash budding initiatives.

Reflect on how to strike a balance between teacher guidance and children's decision making so that needs for learning and creativity are constructively met (Koestner, 1984). "Guide [the child] by providing a responsive environment. It is my belief that this approach will lead to the controlled kind of freedom which seems to be necessary for productive, creative behavior (Torrance, 1970, p.15)."

Dramatic play spaces. An indispensable classroom ingredient for preschool play is the housekeeping corner. Teachers and children respect and treasure the dramatic play corner. In rich variety, dress up clothes are heaped in baskets. Teachers may be challenged by how much to guide or not intervene in dramatic play scenarios. One four 1/2 year old stomped over to her teacher after another playmate had wandered into the housekeeping corner, sat down and said " Bring me a beer, woman!" When we explained that he must have heard that kind of talk from a man to someone in his life, and that some men do make demands like that to a lady, the

plucky girl retorted, "Then I ain't ever getting married!"

Can rigid stylized dramatic play be considered creative in any way? Chasing peers, some preschoolers play "monster" with guttural cries as other children screech and run away in pretend or real fear. The repetitive "monster" play requires no surprise scripts or fanciful variations on a theme. Yet the teacher who wants to promote creativity needs to help connect the stereotyped behavior of a given young child with the larger world of imaginative dramatic play in the preschool. Vivien Paley, in her richly perceptive musings on how to grow into being a wiser and more perceptive supporter of all children's talents, describes the role of the teacher. Teachers need to be constant observers and learn about each child's unique style, fears, strengths, and use of fantasy. In her book "The boy who would be a helicopter" (1990), Paley describes how she uses a tape recorder to take down children's fantasy play stories and then dialogues with co-teachers to understand better how to support the emotional flowering of each child. She describes her daily technique of taking down dictated child stories. Every day, in a special tape-marked play place on the rug, she reads each child's story and has that child invite classmates to act out that personal scenario. No child can add to the scenario without the express permission of the child whose story is being acted out. Through this daily magic "ritual", Paley creates a climate of safety and acceptance among the children. In a dialectic sense, this teacher creation frees the children from fear of aloneness and being misunderstood. They do not have to

create rigid spaces in which to play out single repetitive themes. The children extend bridges of communication and inclusion for each other in their dramatic themes. The teacher's invitation to create a story, acceptance of each story and each dramatic role play allows the children to extend their social caring as well as their ability to construe bridging roles between play themes. Thus, Paley's work teaches us that by perceptive noticing of children's repetitive themes and how they serve to buffer a young child against anxiety (whether over a new baby sister or over the fact of being in a strange new classroom with lots of unknown persons) and by questioning the children better to understand their dramatic themes and wishes, the teacher can elicit more creative and socially participatory responses from an isolate child.

Power Relations in the Classroom Affect Creativity

How power relations between teacher and students are organized and how space and time and materials are made available for children to choose in classrooms seems to make a difference in child creativity. DAP - Developmentally Appropriate classrooms, as described in detail in materials prepared by the National Association for the Education of Young Children (Bredekamp & Copple, 1997) are more likely to promote children's genuine eagerness to explore materials and relationships without fear of disapproval from teacher or peers.

Teacher dominated classrooms are less likely to lead to children's increased creative expression. Schemp et al. (1983) tested 208 children from first through fifth grade who were in

physical education classes which either had teacher-dominated decision making or had an atmosphere where teachers encouraged students to share in decision making. The shared decision-making group scored significantly higher on creativity, motor skills, and self-concept and they scored higher on positive attitudes.

Other Experiential Domains Where Teachers Can Encourage Creativity

To the list of art or story domains where some children will shine in creativity, we need to add other domains, such as cooking, nurturing younger children, solving social spats between peers, making a shy or a disabled child feel included and welcome in the group, turning cartwheels. A wider lens helps teachers notice and validate creative functioning in domains other than those traditional in early childhood settings.

Encourage collections. Some children are wonderful squirrels as they hoard smooth stones that have taken their fancy. Children trot home from an outing with a bird feather they found on the ground, a few rocks, a golden or scarlet autumn leaf or a berry, and even a frog surreptitiously captured as a treasure to hide under a sibling's covers that night! One four-year-old had a positive genius for discerning tossed away beer bottle caps. He collected pocket fulls! A child's collecting interests need to be nurtured and admired. Of course children need to be taught that they may not harm a creature to "collect" it. But children who find dead beetles or flies can be encouraged to collect them and read about the creatures or objects they are collecting.

Support children's interest in collecting - rocks, leaves,

found bird feathers, sea shells, stamps. Encourage youngsters to delight in something that intrigues them but may repel you. A three- year-old found an earthworm in the play yard at the Center. In awe of its mucus-wreathed body glistening on her plastic shovel, she lifted it triumphantly for the teacher to see. "Yuck!", called out the young teacher. "Put that thing down. It is time to come in and wash up for lunch," she added cheerfully. If Elena wants to learn everything about earthworms or Andrew wants to learn more about itchy skin, or Doretta wants to know all about plumbing and sewer pipes or if Tommy wants to learn how come noses drip in cold weather, then teachers should be ready to help them unearth resources and pictures and materials to satisfy this wonderful creative thirst to know.

Decrease "Consumer Gimmees" Through Emphasis on Creativity

Creative programming has auxiliary benefits for children. When teachers value ideas and talents, artistic efforts and dramatic play efforts, they may decrease the pervasive gimme-gimme, consumer purchase orientations that dominate some children's thinking. "My dad took us for two hours to WalMart on Sunday" reported a ten-year old child from a divorced family. "and he didn't buy us anything - just a can of tuna fish" she added scornfully. By emphasizing art and movement and music rather than commercial toys, teachers "help to unlock children's creative juices and make store-bought purchases pale in comparison." (Holst, 1999, p. 21). Explore nature by going on nature walks and finding natural treasures (in beetles scurrying under an upturned rock, or in odd-shaped

pebbles).Teachers increase children's exhilaration with the natural world rather than exclusive preoccupation with the world of store-bought things.

Partner with Parents to Enrich Creativity in Children's Lives

Parents are primary adults in a child's life. A challenge for teachers is how to make an alliance with families in order to help them find and recognize their child's special "gifts". Sometimes reaching out will require creative techniques, such as phoning each family every few weeks to tell something positive and special about each child.

Primary Prevention and Creativity

What are the Connections between Creativity and Mental Health in Early Childhood?

Fueled by shock at student violence in schools and a lack of civility in many classrooms, a great deal of interesting and creative work on how to galvanize prosocial behaviors for classrooms and whole schools has been carried out over the past decade. As teachers become more thoughtful about the necessity to pay attention to the mental health of children as well as their accomplishments in academic subjects, more of these innovative programs may become implemented in school systems (Harrison, 1976; Honig & Wittmer, 1992).

Students who are afraid of writing or of mathematics, and who are turned off by book reading assignments cannot bring to the classroom the creativity gifts they may well have. The more that teacher responses establish firm foundations of trust and

admiration for each child, the more free to be herself and himself will each child feel. Authenticity is one profound sign of good mental health. Primary prevention requires that teachers receive far more training than is usual in recognizing mental health blocks to early learning and creativity. The daydreaming child, the class clown, the aggressive bully, the smirking child who tries to curry favor with the "powerful" person, the teacher, by constant tattling, all need specialized and acutely sensitive handling. The perceptive teacher frees each child to become deeply comfortable and deeply engaged in the work of learning, so that each child's creativity will emerge in domains reflecting the child's gifts. Prevention of emotional difficulties among young children is a first class way to promote their ability to become fully engaged with early learning.

What Directions are Creativity Research, Practice, and Policy Going in the Next Decade?

Research into how to stimulate creativity among children flourished more thirty years ago than today. Problems of classroom discipline, interpersonal violence, children unable to read and write at grade level, how to manage integration of children with differing levels of disabilities into classrooms - these issues have been of far more concern in recent decades than society's interest in how to promote creativity. Research to enhance creativity for low-creative bright children by providing 10 weekly sessions that included role-playing, creative writing, open discussion and artistic expression did not show strong gains at the

end of the sessions (Sisk, 1972). Use of a delayed-post-test research design might better address the possibility of finding later "sleeper effects" of training. But fostering creativity stil retains an element of mystery.

A challenge for colleges of education is how to find time in the syllabus to focus on promotion of creativity in the classroom. What changes in coursework could be implemented to help adults gain more insights and perspective on their own responses to child creativity and to gain curricular expertise in promoting creativity? It is certainly not easy for some adults with responsibility for a group of youngsters to take a playful perspective on young children's experimentation that may disrupt a classroom (Koestner, 1984). A mature teacher struggles to hold discrepant ideas about a child who is both disruptive to the classroom and also an interesting little fellow who has been acting out some vigorous ideas. Taking the creative attitude toward discovering the gifts and needs of each individual child is a challenge for new teachers. The challenge for college trainers is to enroll young teachers in preparatory programs where they will learn both to create an atmosphere in the classroom that permits and tolerates experimentation and also to set up formal special times when children, unafraid, can share their experiences together. Such preparation needs to provide more specific supervised practica for teachers to optimize creativity in the preschool and kindergarten curriculum (Tegano, Moran, & Sawyers, 1991).

Calm shepherding of and perceptive support for children who are exploring and experimenting in sometimes messy and novel ways as they analyze or synthesize with materials while gaining a rich knowledge base requires a kind of teacher wisdom that may well benefit from **mentoring** programs. A seasoned teacher can provide support for new teachers in the classroom. "Creative behavior cannot be summoned at the will of the teacher or 'ordered by numbers' (Torrance & Gupta, 1964, p.18).

On a positive note, currently there are many multicultural materials available that focus on recognition of ways of fostering creativity with minority children (Greenberg, 1992; Marfey, 1998) and gifted children (Morelock & Morrison, 1996). The wonderful classroom processes and uses of community resources implemented by the Reggio Emilia program in Italy (Gandini, 1994) have done much to stimulate American preschool educators to expand their ideas of art work in the classroom. Ideas for teachers to apply Gardner's theory of multiple intelligence in classroom practices are available (Phipps,1997). Interest in play as the medium par excellence for children to work out important themes for their lives creatively continues to receive excellent support in the literature for teachers (Isenberg & Jalongo, 1997).

For creativity in the domain of science learning, many resources focus on the use of children's questions to awaken new ideas (Gallas, 1995). Environmental sensitivities have led to the creation of curricular materials that emphasize using the natural ecology of the schoolyard to further children's explorations of the

environment (Harlan & Rivkin, 2000). Multicultural sensitivities have resulted in the creation of materials in Spanish as well as English to promote preschool science (George, Malcom, Worthington, & Daniel, 19995).

Certainly DAP (Developmentally Appropriate Practices) guidelines specified by NAEYC (Bredecamp & Copple, 1997) have energized many preschool teachers to examine their own work and to move toward more creativity-affirming practices. Interpreters of child development theories have worked hard to promote "constructivist classrooms" based on Piagetian concepts of equilibration and the fundamental necessity for hand-on experiences (Kamii & DeVries, 1980) which give a central role to children's creation of concepts based on their own experimentation and out-loud thinking through of problems and solutions.

Vygotsky's theory has become more widely disseminated and gives a powerful affirmation to the creative role of the teacher. Vygotsky's notion of the "zone of proximal development" centralizes the role of the adult in helping a child advance toward greater understandings and skills. Teacher training must take up the challenge of how to clarify this creative role for adults who will be working in classrooms and with recreational groups (Honig, 1999).

A straightforward way to assist teachers in transforming their ideas to permit a passion for creativity to flourish, would be to supply a generous portfolio of specific activities for use with young children (Amabile, 1989). Hendricks & Wils (1975)

describe simple physical awareness activities for stretching the body and mind, working with dreams, using guided imagery and Sufi stories with children to help them expand awareness of their inner powers to be creative. Some of the stretch and relax exercises would be wonderful also to reduce children's tensions from the rushed lives they often experience at home. Centering and calming the children through these exercises will allow them to use their energies for creativity rather than emotional and intellectual defenses against their stress. The creativity games devised by Torrance & Gupta (1964) (and described in earlier sections) are excellent for teachers to implement.

A rich supply of workbooks and curricular guides are currently available for helping children become aware of the consequences of their own actions and thinking processes. Some of the programs, such as "Think Aloud" (Camp & Bash, 1985) use dramatic play areas and tagboard strips with animal pictures to help children learn how to deal with difficult feelings and situations. Suppose a child in the classroom is leaning back and tipping her chair and that makes another student mad. What plan could the student make? Has the student seen someone else respond in a different way besides acting out mad feelings in such a situation? This program promotes children's creativity in thinking of all possible consequences of inappropriate behaviors. One scenario asks the class "How many different consequences...might happen if you throw a ball in the house (p.193)?"

Some new techniques are available for older children and for

adults to free up their thinking and get creative ideas flowing. In his book "Mind Mapping Games" Buzon (1990) encourages students to draw, doodle, create diagrams, sketch radiating lines, make up comic book blurb bubbles and other techniques as aids to free association around a topic that the student needs to write about. The resultant verbal plus spatial productions confirm how much a student really does already know about a topic and what ideas have blossomed forth on the branches of the radiating lines that connect the central topic to the student's musings and associations. This technique might be useful with overly constricted youth who are too worried about messy papers or not being competent enough to write a long report.

Recent theoretical work has clarified aspects of creativity and or intellectual functioning in children. Gardner's (1983) ideas about multiple intelligences mean that many youngsters have specialized gifts, more in one area than another. In the Japanese tale of Crow Boy, all the children ridicule a poor peasant child who comes to the village school. The teacher does nothing to intervene, but gradually becomes aware that this boy has a strange and unique gift the others do not have. He can imitate crows and call them down from the skies. Only when the teacher observes, notices, reflects, and cares about the unique talent of this ostracized child can the teacher begin to make creative efforts to change the classroom climate toward respect for each child.

Sternberg's (1985) triarchic theory of intelligence has teased out components of intellectually creative functioning. What verbal

and performance components must the child use in solving various kinds of problems and how will he decide how to combine these into an overall strategy ? How does the child represent information? How well has the child figured out how to trade off speed for accuracy in handling a complex intellectual problem? Sternberg emphasizes the importance of the child's response to novelty and the importance of using what he calls "automatization" of component operations to smooth the solution of problem solving tasks. For a child to learn how to solve analogies, for example, Sternberg identifies component skills he must learn: encoding, making inferences, mapping concepts from one domain to another; application of rules generated from mapping; comparisons of word and concept meanings; justification reasoning to defend one's conceptual thinking; and ability to produce an overt response to a creative problem, such as solving an analogy of the type: Lawyer is to Client as Teacher is to (?). When several answer choices are offered (Principal; Student; Custodian), the child must galvanize all the component process skills in solving the analogy.

How Can We Promote Creativity in Society?

A difficult challenge for society is how to promote the creativity, talents and giftedness of all citizens, regardless of color, social class, national origin, or gender.

Gender and creativity. Gender issues in creativity are certainly complex. Creativity is a gift that flourishes among young children. However, boys are frequently allowed more freedom of movement, more permission to cross streets and roam further in

neighborhoods, more indulgence for climbing and jumping and expressing the exuberance of their body creativity in sports and games. Girls are not pictured as often as adventurous characters on television shows or on television commercials. Thus, teachers and recreational counselors need to craft new ideas to permit equal flourishing of creativity among boys and girls.

Stories that feature creative heroines are one technique adults can use. For young children, the story of the paper bag princess shows the gumption and ingenuity of a girl who cleverly bests a dragon to rescue the boy with whom she often plays tennis. The young princess pretends to admire the dragon's fire breathing and asks for demonstrations over and over until the dragon runs out of fire and it is safe for her to go into his cave and rescue the boy. However the boy snubs her. Since her regular clothes were singed off by the dragon's breath of fire, she had hit upon the idea of using a paper bag as temporary clothing. The young man's contemptuous response to her disheveled, sooty appearance leaves this creative young lady determined to go her own way. Female "creativity" may not be appreciated by young (or older) males. Counselors and teachers need to sustain the self esteem of girls whose creative and spunky ideas are "put down" by others in the group.

The importance of fairy tales. The use of fairy tales has been urged as a means of helping children focus on their identity and come into a realization of their own powers of self-healing (Thomas, 1999). Bettleheim (1976) eloquently explained that for a

fairy tale to enrich a child's life:

> it must stimulate his imagination; help him to develop his intellect and to clarify his emotion; be attuned to his anxieties and aspirations, give full recognitive of his difficulties, while at the same time suggesting solutions to the problems which perturb him. (p.5)

In the fairy tale of Hansel and Gretel, Gretel's imaginative ideas save the day. She cleverly provides a skinny bone for Hansel to thrust through the bars so the witch believes he is still not fattened up enough for her to roast and feast upon. It is important for teachers to search out materials where girls are heroines and save the day or think up wonderful solutions for life problems. Girls will identify with the heroines in such stories. This form of "bibliotherapy" as it were can provide role models for girls who are marching to a different drummer, especially in groups where cliques value expensive outer clothes or makeup over sterling ideas and gems of insights!

In the story "Rachel the clever" (Sherman, 1993), a king boasts at an inn that he would only marry a woman who was as clever as he. The innkeeper in turn boasts of his daughter Rachel's ability to solve riddles. So the story begins:

> "I don't like liars", the king told the innkeeper. "I will ask you three riddles. If your daughter can solve them, you will be rewarded, but if she fails, you shall lose your inn. First, what is the fastest thing? Second, what is the richest thing? Third,what is the dearest thing?" Sadly the innkeeper went

home to his daughter, Rachel, and told her what the king had said. Rachel smiled. "You won't lose the inn, Father. Go to the king and tell him that Thought is the fastest thing, life-giving earth is the richest thing, and Love is the dearest thing." (p.44)

Rachel's quickness of intellect and her quirky ways of analyzing and responding to a challenge are tested and proven several times throughout this tale. At one point the king demands that she bring him a gift that is not a gift. Rachel brings two doves and at the instant of her handing them over to the king the doves fly away.

Such stories can inspire young girls to want to be imaginative and creative even though that means they may differ from others in thinking up solutions to life problems. Preteen girls are more vulnerable to self-discouragement when they perceive that their ideas are not valued as much as those of boys.

Creative activities can buffer children against stress. Mental health issues are rampant in many families with heavy stresses due to poverty, inappropriate communication patterns, or divorce. When children are scared or worried because of family troubles or health problems in the family, their creativity may be very subdued. By stereotypic actions, children try to cope with fears and yet they may box themselves into rigid "solutions". One preschooler, whose divorcing parents were fighting a great deal in the home, lay on the floor of the childcare center and turned the pages of Maurice Sendak's "Where the wild things are" over and over. The monsters in

that book were safely within the pages. He could control those monsters by closing the book. He also drove a small toy car through the doll house to the opposite side and let the car crash onto the floor. Then he retrieved the car and repetitively carried out the same motions. Because of fierce troubles at home, he confined his play to symbolic, "safe" actions he could control and replay over and over.

A challenge for counselors and parents is to use their own creativity to find "magic" ways to empower children to face their own fears and deal courageously with them. Stories provide one such technique. Creating and reading stories with children which show children dealing with threats to their well-being positively and successfully can release their coping skills. Brett (1986) created the "Annie stories" to help her young daughter cope with anxious feelings and release more imaginative ways to handle tense situations, such as a scary tiger in a bad dream, or dealing with the first day of kindergarten. In one "Annie" story, Brett told her daughter she would give her an invisible secret ring and "when you have it on you cannot be harmed. So if something frightening is happening to you in a dream, you just need to remember that you have your dream ring on and that you are protected" (p.39). There are social situations for which a child needs to create personal emotional solutions. Annie stories about a child much like the child the adult is caring for can be crafted as a powerful tool to embolden the child and release creative coping energies in the domain of socioemotional challenges.

CONCLUSIONS

The tools to promote our own creative ideas in order to support young children's creativity are everywhere available. Perhaps what we simply need is a clarion call to "pick up the tools and use them with good will!"

REFERENCES

Amabile, T. M. (1989). Growing up creative: Nurturing a lifetime of creativity. New York: Crown Publishers.

Andrews, J. H. (1988). Poetry: Tool of the classroom magician. Young Children, 43(3), 17-25.

Aronson, E. The jigsaw classroom. Beverly Hills, CA: Sage.

Benzie, T. (1987). A moving experience. Dance for lovers of children and the child within. Tucson, AZ: Zephyr.

Bettelheim, B. (1976). The uses of enchantment. London: Penguin.

Borgman, J. (2000, Winter). Respecting the creativity in our children. Montessori Life, 42-43.

Chenfeld, M. (1995), Creative experiences for young children. 2nd ed. Orlando, FL: Harcourt Brace.

Cohen, G. D. (2000). $c=me^2$: The creativity equation that could change your life.

Bredekamp, S., & Copple, C. (1997)(Eds.), Developmentally appropriate practice in early childhood programs (rev.ed.). Washington, DC: NAEYC.

Brown, R. T. (1989). Creativity: What are we to measure? In J. A.Glover, R. R. Ronning, & C. R. Reynolds (Eds.), Handbook of creativity (pp. 3-32). New York: Plenum Press.

Brett, D. (1986). Annie stories. Victoria, Australia: Penguin Books.

Buzan, T. (1990). The mind map book. New York: Dutton.

Camp, B. W., & Bash, M. A.(1985). Think aloud: Increasing social and cognitive skills - A problem-solving program for

children. Champaign, IL: Research Press.

Cerf, B. (1964). Animal riddles. New York: Random House.

Cohen, S., & Oden, S. (1974). An examination of creativity and locus of control in children. Journal of Genetic Psychology, 124, 179-185.

Dowd, E.T. (1989). The self and creativity: Several constructs in search of a theory. In J.A. Glover, R. R. Ronning, & C. R. Reynolds (Eds.), Handbook of creativity (pp. 233-241). New York: Plenum Press.

Duckworth, E. (1996). The having of wonderful ideas and other essays on teaching and learning. New York: Teachers College Press.

Ewart, F. (1998). Let the shadow speak: Developing children's language through shadow puppetry. Staffordshire, England: Trentham.

Gable, S. (1999). Promote children's literacy with poetry. Young Children, 54(5), 12-15.

Gallas, K. (1995). Talking their way into science: Hearing children's questions and theories, Responding with curricula. New York: Teachers College Press.

Gandini, L. (1994). Educational and caring spaces. In C. Edwards, L. Gandini, & G. Forman (Eds.), The hundred languages of children: The Reggio Emilia approach to early childhood education (Chapter 8). Norwood, NJ: Ablex.

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books.

George, Y.S., Malcom, S. M., Worthington, V. L., & Daniel, A. B. (Eds.).(1995). In touch with preschool science. Washington, DC:

American Association for the Advancement of science.

Glover, J. A., Ronning, R. R., & Reynolds, C. R. (1989). Handbook of creativity. New York: Plenum Press.

Goetz, E. M. (1981). The effects of minimal praise on the creative blockbuilding of three-year-olds. Child Study Journal, 11, 55-67.

Goetz, E. M. (1989). The teaching of creativity to preschool children: The behavior analysis approach. In J. A.Glover, R. R. Ronning, & C. R. Reynolds (Eds.), Handbook of creativity (pp.411-428). New York: Plenum Press.

Greenberg, P. (1992).Ideas that work with young children. Teaching about Native Americans? Or teaching about people, including Native Americans? Young Children, 47(6), 27-30, 79-81.

Harlan, J. C., & Rivkin, M. S. (2000). Science experiences for the early childhood years: An integrated approach. 7th ed. Columbus, OH: Merrill/Prentice Hall.

Harrison, M. (1976). For the fun of it: Selected cooperative games for children and adults. Philadelphia, PA: Nonviolence and Children's Series. Friends and Peace Committee.

Healy, J. M. (1994). Your child's growing mind. New York: Doubleday.

Hendricks, G., & Wils, R. (1975). The centering book: Awareness activities for children, parents, and teachers. New York: Spectrum Books.

Holst, C. B. (1999). Buying more can give children less. Young Children, 54(5), 19-23.

Honig, A. S. (1982). Playtime learning games for young children. Syracuse, NY: Syracuse University Press.

Honig, A. S. (1988). Research in review. Humor development in children. Young Children, 43(4), 60-73.

Honig, A. S. (1996, Fall). Using an "I can problem solve" approach with children. NYSAEYC Reporter, p.9.

Honig, A. S. (1998). Sociocultural influences on sexual meanings embedded in playful experiences. In D. P Fromberg & D. Bergen (Eds.). Play from birth to twelve and beyond: Contents, perspectives, and meanings(pp. 338-347). New York: Garland Press.

Honig, A. S. (1999). Critical issues and research in early childhood education. In H. K. Chiam (Ed.), Toward excellence in early childhood education: Policies and practices in the 21st century (pp. 95-117). Selangur Darul Ehsan, Malaysia: Pelanduk Publications.

Honig, A. S., & Wittmer, (1982). Teacher questions to male and female toddlers. Early Child Development and Care, 9, 19-32.

Honig, A. S., & Wittmer, D. S. (1992). Prosocial development in children: Caring, sharing and cooperation: A bibliographic resource guide. New York: Garland Press.

Isenberg, J. P. & Jalongo, M. R. (1997). Creative expression and play in early childhood. Upper Saddle, NJ: Merrill.

Kamii, C., & DeVries, R. (1980). Group games in early education: Implications of Piaget's theory. Washington, DC: NAEYC.

Koestner, R., Ryan, R. M., Bernieri, F., & Holt, K. (1984) Setting limits on children's behavior: The differential effects of

controlling vs. informational styles on intrinsic motivation and creativity. Journal of Personality, 52, 233-248.

Kelner, L. M. (1993). The creative classroom: A guide for using creative drama in the classroom. Portsmouth: NH: Heinemann.

Lane, T. W., Lane, M. Z., Friedman, B. S., Goetz, E. M., & Pinkston, E. M. (1982). A creativity enhancement program for preschool children in an inner city parent-child center. In A. M. Pinkston, J. L. Levitt, G. R. Green, N. L. Linsk, & T. L. Rzepnicki (Eds.), Effective social work practice: Advanced techniques for behavioral intervention with individuals, families and institutional staff (pp. 435-441). San Francisco, CA: Jossey-Bass.

Marfey, A. (1998). The miracle of learning: How to inspire children. A multicultural approach to early childhood development. Albany: Windflower.

Morelock, M. K., & Morrison, K. (1996). Gifted children have talents too Multidimensional programmes for the gifted in early childhood. Victoria, Australia: Hawker Brownlow Eudcation.

Orlick,T. (1978). The cooperative sports and games book. Challenge without competition. New York: Pantheon Books.

Paley, V. (1990). The boy who would be a helicopter: The uses of storytelling in the classroom. Cambridge, MA: Harvard University Press.

Palladino, L. J. (1997). The Edison trait. New York: Random House.

Phipps, P. (1997). Multiple intelligences in the early childhood classroom. Santa Rosa CA: McGraw Hill.

Pleydell, S., & Brown, V. (1999). The dramatic difference: Drama in the preschool and kindergarten classroom. Portsmouth , NH: Heinemann.

Sapon-Shevin, M. (1986). Teaching cooperation. In G. Cartledge and J R. Milburn (Eds.) Teaching social skills to children (pp. 270-302). New York: Pergamon Press.

Schemp, P.G., Jeffers, J. T., & Zaichowsky, L. D. (1983). Influence of decision making on attitudes, creativity, motor skills, and self-concept in elementary children. Research Quarterly for exercise and Sport, 54, 183-189.

Sherman, J. (1993). Rachel the clever and other Jewish folktales. Little Rock, AR: August House Publishers.

Shure, M .(1995). Raising a thinking child workbook. New York: Henry Holt.

Sigel, I., & Saunders, R. (1979). An inquiry into inquiry: Question asking as an instructional model. In L. Katz (Ed.), Current topics in early childhood education (pp. 169-193). Norwood, NJ: Ablex.

Sisk, D. (1972). Relationship between self-concept and creativity: Theory into practice. Gifted Child Quarterly, 16, 229-234.

Sternberg, R. J. (1985). Beyond IQ: A triarchic theory of human intelligence. New York: Cambridge University Press.,

Tegano, D. W., Moran, J. D.111, & Sawyers, J. (1991). Creativity in early childhood classrooms. Washington, DCL: National Education Association.

Thomas, J. (1999). The role of the fairy story in development a 'sense of self' in young children with identified emotional and behavioural difficulties. Early Child Development and Care, 157, 27-50.

Torrance, E.P. (1962). Guiding creative talent. Engelwood Cliffs, NJ: Prentice-Hall.

Torrance, E. P. (1964). Role of evaluation in creative thinking. Minneapolis, MN: Bureau of Educational Research, University of Minnesota.

Torrance, E. P. (1970). Encouraging creativity in the classroom. Dubuque, IO: William C. Brown.

Torrance, E. P. (1971). Identity: The gifted child's major problem. Gifted child Quarterly, 15, 147-155.

Torrance, E. P.(1979). The search for Satori and creativity. Buffalo, NY: Creative Education Foundation.

Torrance, E. P., & Gupta, R. (1964, February). Development and evaluation of recorded programmed experiences in creative thinking in the fourth grade. Minneapolis, MN: Bureau of Educational Research, University of Minnesota.

Resources for Teachers to Read with Children

Hale, B. M. (nd). The elf in my ear. Brigham City, UT: Blue Creek.

McCord, D. (1961). Every time I climb a tree. Boston: Little, Brown.

Merriam, E. (1985). Blackberry ink. New York: William Morrow and Company.

Merriam, E. (1988). You be good and I'll be night. New York: Morrow Junior Books.

Myers, R. E., & Torrance, E. P. (1965). Can you imagine? A book of ideas for children in the primary grades. Boston, MA: Ginn and Company.

Myers, R. E., & Torrance, E. P. (1966). For those who wonder. Boston, MA: Ginn and Company.

Neuschwander, C. (1997). Sir Cumference and the first round table: A math adventure. Watertown, MA: Charlesbridge Publishing.

Parish, P. (1963). Amelia Bedelia. New York: Harper & Row.

Preludsky, J. (1994). The sheriff of Rottenshot. New York: William Morrow and Co.

Schenk de Regnieres, B. (1958). What can you do with a shoe? New York: Simon & Schuster.

Seuss, Dr. (1961). The Sneetches and other stories. New York: Random House.

Sharmat, M. W. (1984). My mother never listens to me. Niles, IL: Albert Whitman.